

Collider Accelerator Department

Welcome to:

Surviving an Environmental
Management System Audit

And

Brief Overview of OSH Management System



Surviving an EMS Audit

- Today we will review how to survive an EMS AUDITS:
 - basic information about EMS audits
 - typical questions an EMS auditor might ask
 - tips for the auditee
 - basic audit management



Why are we being audited AGAIN?

- BNL has an EMS registered under the ISO 14001 standard
- BNL voluntarily subjects itself to annual “surveillance” audits
- BNL uses an independent, accredited registrar



What is covered in an EMS audit?

- The registrar evaluates the EMS at:
 - the laboratory level
 - the Department level
 - the work area level
- They evaluate whether the EMS:
 - meets the intent of ISO 14001
 - is effectively implemented
 - is being maintained



What is covered in an EMS audit?

- The auditors may also:
 - verify whether nonconformances have been addressed
 - evaluate progress on environmental objectives
 - assess EMS strengths
 - identify opportunities for improvement



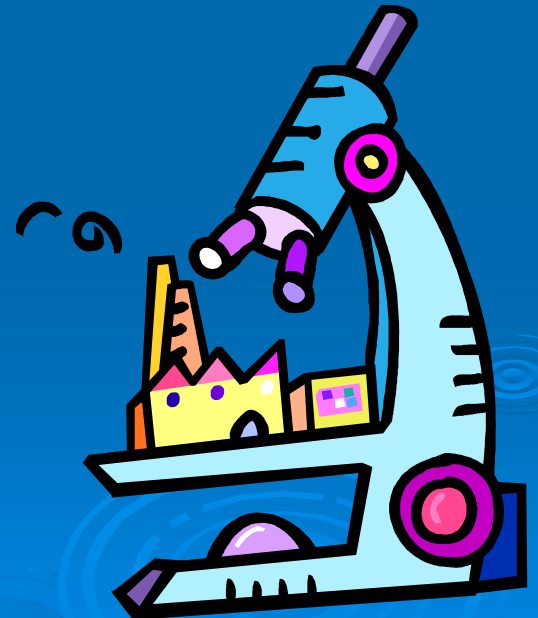
What is covered in an EMS audit?

- EMS audits are generally “success-oriented”
 - however, they may still identify problems
- EMS audits typically involve:
 - review of documents
 - review of other management systems related to the EMS
 - facility walkthroughs
 - interviews at all levels of the organization

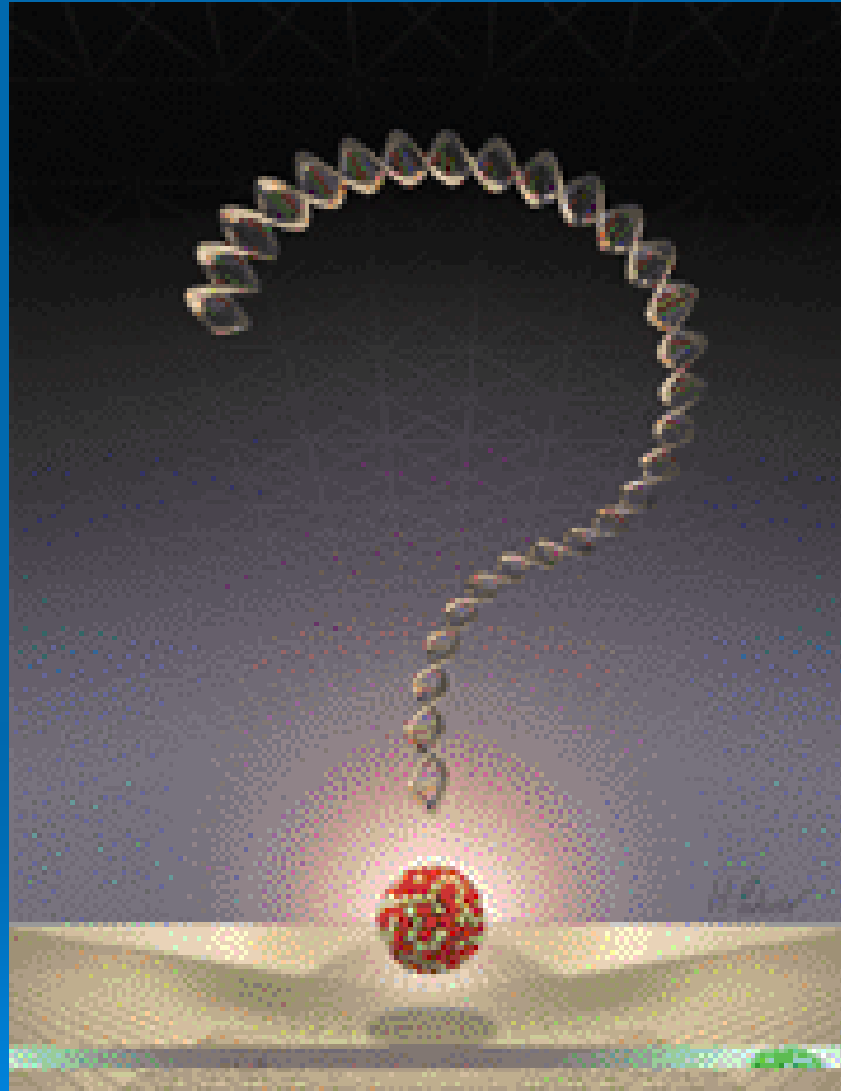


What is covered during an interview?

- Management interviews focus on:
 - environmental objectives and targets
 - roles and responsibilities
 - resources associated with the EMS
- Staff interviews focus on:
 - awareness of the environmental policy
 - awareness of environmental impacts
 - how staff learn about requirements
 - objectives and targets
 - training and communication
 - corrective and preventive action



Questions to expect during an EMS audit



What are the commitments in the Environmental Stewardship Policy?

- Know the 5 commitments **and** how they apply to work:
 - comply with requirements
 - minimize or prevent pollution
 - clean up existing contamination
 - inform and involve the community
 - improve our ISO 14001 systems



What aids may be used to explain the Environmental Stewardship Policy?

- It is okay to show the written policy*
- Badge-cards with the policy are available
- Use the C4P2 acronym
- Show a summary brochure

*see <http://www.bnl.gov/bnlweb/stewardship.htm>



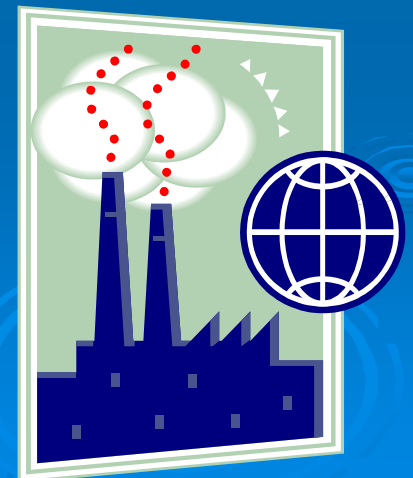
Where do we identify and control environmental impacts?

- Environmental impacts are identified and controlled through:
 - engineering design reviews
 - process assessments
 - work planning
 - accelerator and experiment ESH reviews



What Significant Aspects of C-A processes impact the environment?

- Significant Aspects that impact C-A operations are listed below — **know which ones apply to your Group:**
 - chemical and radiological material storage and use
 - waste generation: regulated industrial, hazardous, radioactive, and mixed waste
 - liquid discharges
 - air emissions
 - power consumptions
 - water consumption
 - sensitive/endangered species and habitats
 - environmental noise
 - soil activation



How do we PREVENT impacts to the environment?

- The primary ways to prevent impacts to the environment are:
 - administrative controls
 - work planning and review
 - pre-job briefings
 - training
 - following SBMS Subject Areas
 - following C-A Operating Procedures
 - preventive maintenance
 - assessments
 - engineered controls
 - design review
 - plugged drains
 - dikes to prevent spills from reaching the environment
 - caps over soil activation areas to prevent rainwater infiltration



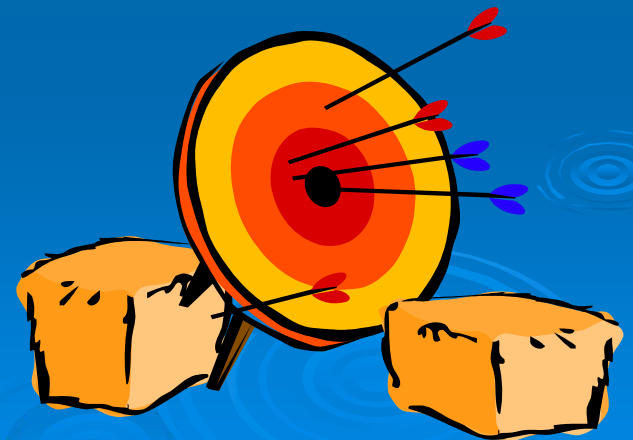
What could potentially happen if procedures are not followed?

- Environmental contamination
- \$\$\$ for cleanup and inefficiencies like waste generation
- Regulatory fines
- Operations shut down temporarily or permanently
- Down time for project/equipment
- Consumption of YOUR time correcting the problem
- Loss of trust with DOE, the community, regulators, and partners
- Impact on ability to recruit (people may not want to work for a polluter)
- Impact on our business competitiveness and image
- Disciplinary action, up to and including termination



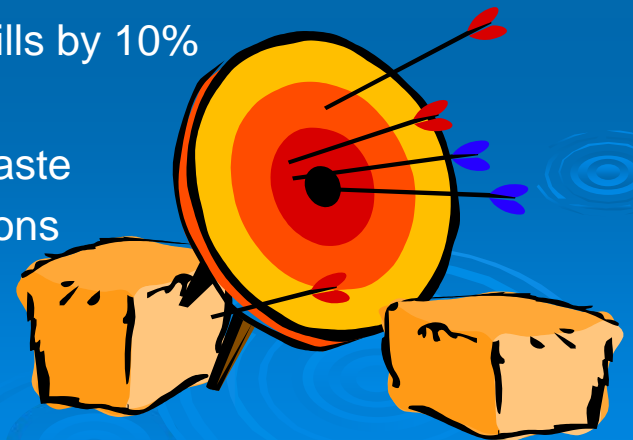
What are C-AD's environmental objectives?

- Implement Corrective Actions to Achieve Article 12 Conformance
- Reduce the use of and eventual phase out of Ozone Depleting Substances
- Schedule and conduct regulatory compliance assessments
- Integrate pollution prevention (P2) into the work planning processes
- Evaluate and implement pollution prevention opportunities
- Expand awareness and involvement in the BNL P2 Program
- Reduce or prevent generation of non-routine waste, including spills
- Fully implement groundwater protection program



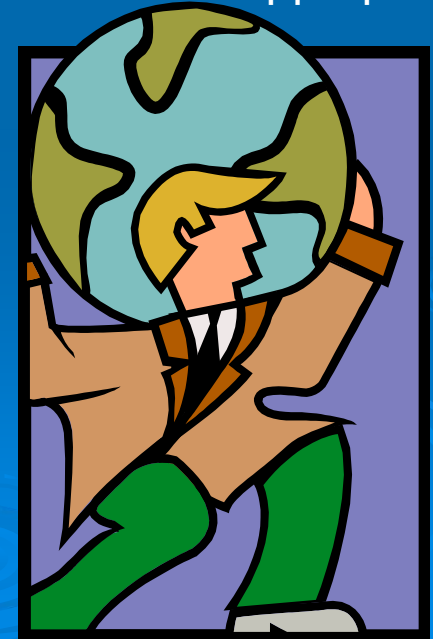
What are C-AD's environmental targets?

- Implement all FY03 compliance assessment corrective actions
- Involve ECRs in review of applicable Clean Air Act regulatory requirements
- Participate in the Liquid Effluent audit
- Participate in the programmatic assessment of Document Control
- Participate in the RCRA subject area assessment
- Analyze all waste generating activities
- Review all experiments in accordance with the Work Planning
- Submit a minimum of two pollution prevention project proposals
- Reduce spill response costs by ~\$30,000 through education
- Reduce average release volume of reportable spills by 10%
- Develop a plan for the reduction of PCB devices
- Monitor waste generation rates for non-routine waste
- Zero impact on groundwater from current operations



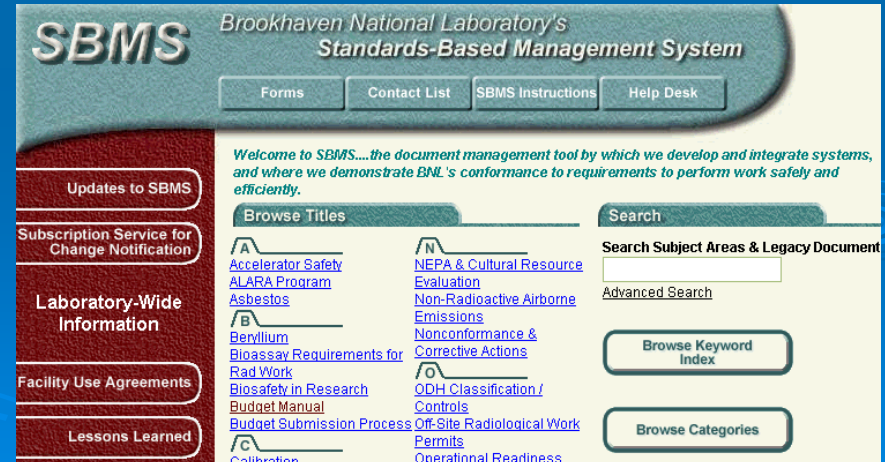
What are YOUR responsibilities with regard to environmental management?

- **Comply** with Laboratory policies, standards, procedures
- **Identify** environmental hazards and impact of work
- **Help** achieve objectives and targets related to your work
- **Provide** input on controls/work practices to minimize risk
- **Apply** pollution prevention/waste minimization techniques to your work
- **Respond** to emergency situations, alarms, or occurrences as appropriate



How do you find out about new environmental requirements?

- SBMS including the SBMS subscription service
- C-A operating procedures
- Training
- Your supervisor
- Your Environmental Compliance Representative



What response/action would you take in an environmental emergency?

- Be prepared:
 - complete training
 - review your Local Emergency Plan
 - know the indoor assembly, outdoor assembly, and shelter-in-place areas
- In an actual emergency:
 - activate alarms
 - report the emergency - call 911 (2222)
 - notify the Local Emergency Coordinator
 - report to the outdoor assembly area if the building alarm bell sounds
 - report to indoor assembly if the steady site siren signal sounds



How do contractors who perform work in your area know about operational controls?

- Requirements are included in the contract
- Work planning or pre-job briefings provide specifics
- Training is provided
- Contractor activities are subject to oversight
- Contract technical representative informs the contractor of problems



Are any environmental measurements taken that require calibrated equipment?

- At C-AD, environmental measurements are done by outside laboratories



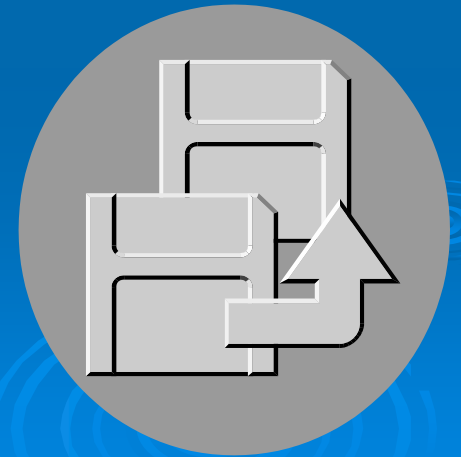
Is preventive maintenance performed?

- Examples are:
 - leak detection equipment on storage tanks
 - air pollution control devices (HEPA filters)
 - activated-soil cap maintenance
 - cooling-water system maintenance
 - electrical-distribution system maintenance



Are backup systems available to provide continuous control of operations?

- An example of continuous work control is:
 - use of uninterruptible power supplies
 - to back up controls for monitoring flow and pressure
 - to back up alarm systems
 - to back up interlock monitoring systems



How would you document an environmental nonconformance?

- Notify the responsible individual
- Follow SBMS procedure and/or C-A operating procedure
- Analyze the nonconformance
- Determine corrective and preventive action
- For assistance, contact the C-A ESHQ Division Head (Ray Karol x-5272) who will coordinate documenting a non-conformance



Audit Tips

- The best way to survive an audit is to **be prepared**
 - be knowledgeable about how you control your work
 - have files organized and easily accessible
 - be sure key personnel are available
 - be able to explain your program, the process, etc
 - the best defense is an implemented, documented program



Audit Tips – Responding to Questions

- Answer the question posed
 - take time to think and formulate your response
 - if you don't understand the question, ask for clarification
 - provide a complete answer
 - don't babble, or try to hoodwink the auditor
 - if it is a Yes/No question, generally answer “yes” or “no”



Audit Tips – Responding to Questions

- It's okay to say "I don't know" or "I don't understand" if it's true
 - don't oversell your expertise or make things up
 - if you are not the key contact for a subject, defer to them
 - offer to find the answer, or direct the auditor to an individual who has first hand knowledge



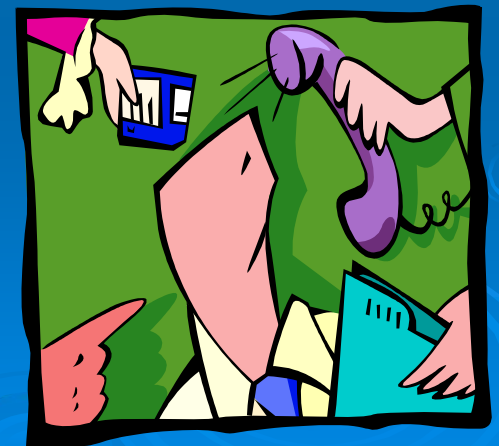
Audit Tips - Attitude

- **Silence is okay**
 - don't feel obliged to fill a void with verbiage
 - don't volunteer additional/tangential information
- Be honest, courteous and pleasant, respectful and professional
 - be truthful about problems
 - **mention corrective/preventive actions** planned or taken
 - don't get defensive/violently defend your work – keep your cool
- Portray a positive attitude
 - this is not the best forum for venting your complaints
 - use available channels and follow the management chain
 - audit findings = resource consumption
 - fewer findings allow us to focus limited resources on priority issues



Audit Tips – Assistance and Priority

- If you want someone else present, then request it
 - manager, supervisor or ECR will join if asked
- Don't neglect urgent responsibilities to accommodate the auditor
- If you are **unavoidably** busy, say so
 - present the auditor with an alternative contact or time



Audit Tips - Documents

- Only give auditors final, **current**, signed documents
- If specifically asked for drafts, mark them “information only”
- When web-related documents are needed, print them out for auditors
- Make the extra effort to provide hard copies of documents requested



OSH Management System

- BNL Director has determined BNL will implement this management program as part of initiative to improve OSH at BNL to World-Class status
- Pilot Program with C-AD, F&O and ESHQ Directorates
- Very similar management program to EMS ISO 14001
- Pre-assessment in June 2004 after EMS registration audit
- Same registrar will do OSHAS 18001 audit
- Registration audit in September 2004



OSHAS 18001 Overview

- OSH Management Representative – Ed Lessard
- Major elements of program:
 - Health and Safety policy
 - Planning
 - Implementation and Operations
 - Checking and Corrective Actions
 - Management Review



Current Status of C-AD Implementation

- Training of 3 C-AD personnel on OSHAS 18001 and Auditing
- Gap Analysis complete in April 2004, implementing recommendation
- Writing BNL and C-AD implementing procedures
- Completing risk assessments
 - Facility-wide
 - Area-wide
 - Jobs



Yet to come

- C-AD to finish facility, area and job risk assessments
- Complete procedures
- Complete staff training on OSH management
- Be prepared for registration by 9/04
- Continue to maintain registration similar to EMS program

Questions ?

